

Serial No. 09/780,903  
Art Unit: 3634

In the Figures, the same numerals are used to refer to similar parts of the liner.

Fig. 1 is a partial plan view of a liner 1 of the invention. Liner 1 comprises a flexible non-skid plastic web 3 which can be formed from a plasticized polymer if required. The liner 1 shows ridges 2 comprised of a plastic which has a higher Shore A hardness than the web. The valleys between the ridges are shown as 4.

Fig. 2 is a partial bottom plan view of the liner 1 of Fig. 1 showing the ridges 5 and valleys 6. The ridges 5 contact the surface on which the liner is laid.

Fig. 3 is a view along the arrows 3-3 in Fig. 1. The web 3 of liner 1 comprises a plastic which is flexible, lies flat and does not curl and provides non-skid contact with the surface on which it is laid. The ridges 2 are formed from a plastic with a higher Shore A hardness than the web 3. The top and bottom surfaces of the web have an undulating form with valleys and ridges. The ridges 2 are capped with a plastic which is harder than the plastic of web 3.

Fig. 4 is a sectional view in the direction of arrows 4-4 of Fig. 1. Fig. 4 shows liner 1 cut through the thin portion of web 3. The liner is supported by ridges 5 which permit air to flow between a supporting surface and the liner 1. The top surface comprises the valleys 4 and the capped ridges 2.

Fig. 5 is an end view of an embodiment of the invention where the liner 1 comprises a web 9 having ridges 7 with a triangular shaped profile. The upper surface 8 of web 9 is substantially flat with the upward extending ridges 7. The bottom surface of web 9 has an undulating cross-section with ridges 5 and valleys 6.

Fig 6 is an end view of a liner 1 comprising a substantially flat web 10 having ridges 2 formed from a harder plastic than the web, on the top surface. The ridges 2 are coextruded with the web 10. However, the ridges 2 can be formed separately and joined to the web 10 by fusing,

Serial No. 09/780,903

Art Unit: 3634

gluing and the like. The web 10 is flexible so that it lays flat on a surface. The ridges 2 are formed from a plastic which is harder than the plastic forming web 10.

Fig. 7 is an endview of a liner 1 in which the web 11 is in a corrugated form having ridges 2 and valleys 4 on the top surface and ridges 5 and valleys 6 on the bottom surface. The liner 5 rests on the ridges 5 of the bottom surface. The ridges 5 coincide with the valleys 4 of the top surface. The ridges 2 are capped with a plastic which is harder than the plastic of the web 11, which capped ridges contact and support items on the top surface of web 11. In an alternate embodiment the ridges may be formed by means of the harder plastic which rises from the valleys 4 and protrudes above the top of the ridges 2.

10 The non-curl and non-skid liner of the present invention provides for easy installation and removal of the liner since no adhesive is required to maintain the liner in place.

The plastic or resin from which the webs 3, 9, 10 and 11 of the liner 1 is made can be any plastic or resin which has the required flexibility, hardness and non-skid properties. The plastic or resin can be plasticized or unplasticized and can be foamed or non-foamed. Resins or plastics 15 such as polyurethane, polyester, polyamide, polyolefin and polyvinyl chloride can be adapted to form the web either by selection of the monomers which form the plastic or resin or by addition of plasticizers which are well known in the art. The plastic for forming the web has a Shore A hardness (15 seconds) of from about 50 to about 75 and preferably from about 55-70.

The ridges of the top surface of the liner of the invention are formed from or capped with 20 a plastic or resin which has a hardness greater than the hardness of the flexible plastic forming the web. The Shore A hardness (15 seconds) of the plastic or resin forming the ridges or caps for the ridges is from about 60 to about 100 and preferably from about 65 to about 90. The plastic resin which comprises the ridges on the top surface of the liner is preferably 3 and more